

LISTING OF CLAIMS

1(cancelled).

2(currently amended). A method for treating a metal containing surface comprising at least one shaped electronic component defining at least one opening therein comprising:

cleaning the component,

rinsing the component,

exposing the component to at least one acid containing solution,

contacting at least a portion of the component with a coating composition having a basic pH and comprising at least one silica containing composition thereby forming a coated component,

contacting the coated component with a molten metal, and;

recovering at least one treated electronic component.

3(currently amended). The method of 2 wherein the metal surface comprises at least one member selected from the group consisting of an electric motor, a transformer and components thereof.

4(currently amended) A method for processing a metal containing surface comprising:

cleaning at least a portion of the metal containing surface,

rinsing the metal containing surface,

functionalizing at least a portion of the metal containing surface by exposure to at least one acidic solution,

contacting at least a portion of the metal containing surface with at least one silica-containing silica-containing composition having a basic pH thereby providing a coated metal containing surface,

exposing the coated metal containing surface to a basic solution, and;

contacting with a molten metal.

5(original). The method of Claim 4 wherein the composition of the metal surface is different from the molten metal.

6(currently amended). The method of Claim 5 wherein the coated metal surface comprises zinc and the molten metal comprises aluminum.

7(currently amended) The method of Claim 4 further comprising solidifying the molten metal and heating ~~the metal containing surface~~ to a temperature greater than [[its]] the melting point of the coated metal containing surface and removing [[the]] any liquid formed by the heating [[metal]] from the solidified metal.

8(original). The method of Claim 2 wherein the metal containing surface comprises steel and the molten metal comprises aluminum.

9(original). The method of Claim 4 wherein the method reduces adhesion between the metal containing surface and the molten metal.

10(currently amended). The method of Claim [[4]] 2 wherein the acidic solution comprises hydrochloric acid and further comprising exposing the coated component to a basic solution and wherein the basic solution comprises sodium hydroxide.

11(new). A method for processing a metal containing surface comprising:
cleaning at least a portion of the metal containing surface,
rinsing the metal containing surface,

functionalizing at least a portion of the metal containing surface by exposure to at least one acidic solution,
contacting at least a portion of the metal containing surface with at least one silica containing composition having a basic pH thereby obtaining a coated metal containing surface,
exposing the coated metal containing surface to a basic solution, and;
contacting with a molten metal; wherein the acidic solution comprises hydrochloric acid and the basic solution comprises sodium hydroxide.

12(new). The method of Claim 11 wherein the metal containing surface comprises at least one member selected from the group consisting of an electric motor, a transformer and components thereof.

13(new). The method of Claim 6 wherein the coated metal containing surface comprises a zinc die cast core.

14(new). The method of Claim 6 wherein the amount of silica containing coating is sufficient to interact with the molten metal to form a mixed oxide.

15(new). The method of Claim 2 wherein the coated component is an electrical insulator.

16(new) A method for processing a metal containing surface comprising:

exposing at least a portion of the metal containing surface by exposure to at least one acidic solution,
contacting at least a portion of the metal containing surface with at least one silica-containing composition having a basic pH thereby providing a coated metal containing surface, and;
contacting with the coated metal containing surface a molten metal.

17(new). The method of Claim 16 wherein the silica-containing composition comprises at least one silicate.

18(new). The method of Claim 17 wherein the composition further comprises at least one carbonate.

19(new). The method of Claim 16 wherein the silica-containing composition further comprises at least one organic compound.

20(new). The method of Claim 17 wherein the silica-containing composition further comprises at least one member selected from the group consisting of silica and borate..